

What is claimed is:

1. A light receiving or emitting module sheet characterized by comprising:

plural spherical elements having a light receiving or emitting function,
each spherical element having a nearly spherical pn junction, and positive and
5 negative conductive wire connecting parts provided at both ends of said spherical
element and connected to both ends of said pn junction; said plural spherical
elements being arranged in a matrix with their polarity aligned;

plural conductive wires arranged in parallel to electrically connect in
parallel plural spherical elements in each of plural columns of said spherical
10 elements via said positive and negative conductive wire connecting parts of said
plural spherical elements in each column; and

plural insulating tension wires arranged between rows of said spherical
elements in a direction orthogonal to said conductive wires and woven into a mesh
structure with said plural conductive wires for fixing said plural conductive wires.

15 2. The light receiving or emitting module sheet according to claim 1
characterized by the fact that said positive and negative conductive wire
connecting parts of each of said spherical elements are provided at positions
opposite to each other about a center of said spherical element.

3. The light receiving or emitting module sheet according to claim 2
20 characterized by the fact that a transparent sealing member is provided that
houses said plural spherical elements together with said plural conductive wires
and said plural tension wires in an embedded manner.

4. The light receiving or emitting module sheet according to claim 2
characterized by the fact that each of said spherical elements is a photodiode or a
25 solar battery element.

5. The light receiving or emitting module sheet according to claim 2 characterized by the fact that each of said spherical elements is a light emitting diode element.

6. The light receiving or emitting module sheet according to claim 3
5 characterized by the fact that said conductive wires are connected to said positive and negative connecting parts by using any one selected from soldering, conductive synthetic resin, and alloyed metal.

7. The light receiving or emitting module sheet according to claim 6
10 characterized by the fact that said conductive wires are embedded in said sealing member in a manner in which they are at least partially exposed.

8. The light receiving or emitting module sheet according to claim 2 characterized by the fact that insulating tension wires are provided between said columns of said spherical elements and woven with said conductive wires in parallel thereto.

15 9. The light receiving or emitting module sheet according to claim 3 characterized by the fact that said sealing member is a flexible member made of a transparent synthetic resin material.

10. The light receiving or emitting module sheet according to claim 3
20 characterized by the fact that a reflecting film that reflects light incidental from a light incident side is composed on a surface of a side opposite to said light incident side of said sealing member.

11. The light receiving or emitting module sheet according to claim 3
characterized by the fact that said sealing member comprises a flexible transparent cushion layer that houses said plural spherical elements in an
25 embedded manner and transparent surface layers joined to said cushion layer on

either side.

12. The light receiving or emitting module sheet according to claim 3 characterized by the fact that said sealing member has a heat reflecting film made of a polymer material that selectively reflects heat rays that said spherical
5 elements cannot absorb.

13. The light receiving or emitting module sheet according to claim 2 characterized by the fact that a serial connection means is provided that connects in series said plural conductive wires that connect said plural spherical elements in parallel.

10 14. A method of producing a light receiving or emitting module sheet comprising plural spherical elements arranged in a matrix and having a light receiving or emitting function, conductive wires that electrically connect in parallel said plural spherical elements in each column, and insulting tension wires woven into a mesh structure with said conductive wires for fixing said
15 conductive wires, characterized by comprising:

a spherical element production step of producing said spherical elements having positive and negative conductive wire connecting parts; and

a connection step of melting a joining material for connecting said spherical elements and said conductive wires under Joule heat due to electric
20 current through said conductive wires to connect said spherical elements and conductive wires by said joining material.